

# Blades Groundwater Site (Procino Plating and Peninsula Plating)



U.S. Environmental Protection Agency, Region 3

**February 7, 2018**

By: Connor O'Loughlin

Good Evening, Thank you everyone for participating in this Site Meeting for the [Nonresponsive based on revised scope]

- My name is Connor O'Loughlin. I am the Site Assessment Manager for the USEPA for this site.
- This evening I will be sharing with you some of the details of the [Nonresponsive based on revised scope] and the adjacent areas.



## **Purpose of the Meeting:**

- Site Situation and Assessment Overview.
- Site Background
- EPA's proposed path forward to assess the Procino Plating and Peninsula Plating Sites.
- Consultation steps.
- Onsite and offsite groundwater sampling assessment proposed plan. Path forward post Site Inspection (SI).

Decision/Question: Would EPA support assessment of the two facilities and surrounding Blades and assessment of the groundwater offsite?

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## Site Situation:

### ***Why did EPA request DNREC to do PFAS sampling?***

Procino Enterprises is currently conducting an investigation of their property under DNREC's voluntary cleanup program (VCP). During EPA's review of Site documentation to conduct a closeout of the site, new information was discovered in a photograph which indicated the use of Fumetrol 140 at the electroplating facility which contains PFAS. As a result of this information, EPA recommended DNREC sample the three municipal wells close to the site for PFAS, chromium, and VOCs to determine if contamination was present in the nearby municipal wells.

### ***Where is the PFAS contamination coming from?***

PFAS contamination has been found in the groundwater in the vicinity of 2 nearby industrial plating facilities. However, since the PFAS contamination was recently detected in the municipal wells, further assessment is necessary to determine the source of this contamination because it may be comingled with the existing chromium/metals plume.

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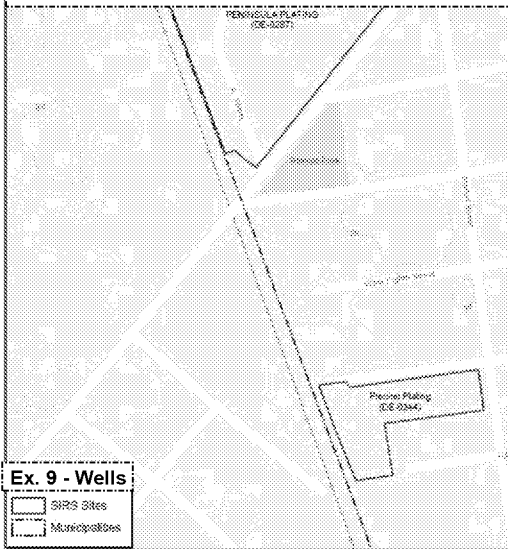


## Assessment Overview:

- After consultation with DNREC and reviewing sample information and site data. The State concurred that additional assessment for PFAS would be needed.
- Initiate investigation of the two facilities.
  - Determine an absence or presence of PFAS and metals contamination which has been identified as migrating to the public and residential wells.

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## Ex. 9 - Wells



## Ex. 9 Wells



## Procino Plating Background:

- Procino Plating Inc. operates manufactured ornamental plating with copper, nickel and chrome; silver and nickel plating for commercial and military use; and fabrication and hard chrome plating of griddle tops since approximately the 1980's.
  - RCRA (1994, 2002, 2007, 2008/2009), Removal (2008), Criminal Investigation (2009-2013)
  - EPA Preliminary Assessment (2010), EPA Site Inspection (2011)
  - Deferred to DNREC for investigation and cleanup (2011)
  - Remedial Investigation (2011-2016), Ongoing RI – State VCP.
  - Spring of 2016, EPA's new Site Assessment manager reviewed the PA/SI documents and noted the presence of the chemical Fumetrol 140 (wetting agent) on containers in the facility in site photographs.

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## Peninsula Plating Background:

- Peninsula Plating Inc. operates manufactured ornamental plating with copper, nickel and chrome; silver, nickel, cadmium plating for commercial use; and fabrication. Hard chrome plating of griddle tops from approximately the 1992 to June 30, 1995. Chemical storage buildings; leaking drums, open top tanks, and containers.
  - Fire at the facility prompted investigation (1995). DNREC gained a search warrant to go onto the property. EPA OSC was alerted and inspected the facility.
  - Emergency Removal Action (August 1995 to December 1995).
  - EPA Site Inspection (1996, 1999)
  - Site was NFRAP'd (1996).
    - The wastes and soils were addressed but groundwater was not.
  - Brownfield Redevelopment (2006-2007), Leaking Tanks Removed (2007)
  - State deferred, VCP- RI/FS (2006-2007)
  - Site closed in 2010.

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# Ex. 9 - Wells



Peninsula Plating (Left). Procino Plating (Right)



# Sample Results:

Client ID		DNREC SIRS	BLADESPW03			BLADESPW03			BLADESPW02			BLADESPW01		
Lab Sample ID		Screening Levels	460-148894-1			460-148894-2			460-148894-3			460-148894-4		
Sampling Date		GW Ingestion	01/22/2018 11:00:00			01/22/2018 11:00:00			01/22/2018 12:00:00			01/22/2018 13:30:00		
Matrix		July 2018	Water			Water			Water			Water		
Dilution Factor			1			1			1			1		
Unit		ng/l	ng/l			ng/l			ng/l			ng/l		
LCMS-537 (MODIFIED)-WATER	CAS#		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
<b>WATER BY 537 (MODIFIED)</b>														
N-ethyl perfluorooctane sulfonamidoacetic acid (NEFOSAA)	2991-50-6	NA	1.88	U	1.88	1.88	U	1.88	1.70	U	1.70	1.87	U	1.87
N-methyl perfluorooctane sulfonamidoacetic acid (MNFOSAA)	2355-31-9	NA	2.75	U	2.75	2.75	U	2.75	2.77	U	2.77	2.72	U	2.72
Perfluorobutanesulfonic acid (PFBS)	375-73-5	NA	8.24		0.18	7.92		0.18	5.35		0.18	5.85		0.18
Perfluorodecanoic acid (PFDA)	326-76-2	NA	0.81	J	0.27	0.83	J	0.28	0.58	J	0.28	1.11	J	0.27
Perfluorododecanoic acid (PFDoA)	307-55-1	NA	0.49	U	0.49	0.49	U	0.49	0.49	U	0.49	0.48	U	0.48
Perfluorooctanoic acid (PFHpA)	375-85-9	NA	5.82		0.22	5.70		0.22	4.92		0.22	6.07		0.22
Perfluorohexanesulfonic acid (PFHxS)	355-48-4	NA	25.8	B	0.15	25.4	B	0.15	21.8	B	0.15	23.5	B	0.15
Perfluorohexanoic acid (PFHxA)	307-24-4	NA	11.7		0.51	11.2		0.52	9.78		0.52	11.9		0.51
Perfluorononanoic acid (PFNA)	375-05-1	NA	32.2		0.24	32.4		0.24	21.5		0.24	33.4		0.24
Perfluorooctanesulfonic acid (PFOS)	1703-23-1	NA	172		0.48	178		0.48	82.8		0.48	102		0.47
Perfluorooctanoic acid (PFOA)	335-67-1	NA	15.1		0.75	15.0		0.75	13.8		0.75	15.8		0.75
Perfluorotetradecanoic acid (PFTeA)	376-06-7	NA	0.28	U	0.28	0.28	U	0.28	0.28	U	0.28	0.25	U	0.25
Perfluorodecanoic Acid (PFTeA)	72029-94-8	NA	1.15	U	1.15	1.16	U	1.16	1.16	U	1.16	1.14	U	1.14
Perfluoroundecanoic acid (PFUnA)	2058-94-8	NA	0.97	U	0.97	0.98	U	0.98	0.98	U	0.98	0.98	U	0.98
Total (PFOA-PFOS)			187.1			193			98.2			117.5		

## Preliminary residential well results:

- 1 well had a concentration of 298 ppt. Several wells had concentrations above the HAL.

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## Proposed Path Forward:



# Ex. 5 Deliberative Process (DP)

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## Consultation with Stakeholders:

- DNREC supports additional assessment of the facilities and offsite groundwater.
- Would EPA support the proposed plan to conduct a Site Inspection?
  - If all programs support the PA/SI steps and potential progression to additional assessment.
  - Conduct consultation with EPA Technical Support for guidance to situate new wells.
- Conduct EPA consultation process with OSRTI and headquarters.
  - Present site assessment steps.
  - Present proposed sampling plan and investigation methods.
- Discuss proposed plan with DNREC, DE-ODW, DHSS.

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## Proposed Sampling Plan:



### Ex. 5 Deliberative Process (DP)

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